# Pinus strobus - Populus tremuloides / Corylus cornuta Forest (White Pine - Aspen - Birch Forest)

COMMON NAME White Pine - Trembling Aspen / Beaked Hazelnut Forest

SYNONYM White Pine - Aspen - Birch Forest

PHYSIOGNOMIC CLASS Forest (I)

PHYSIOGNOMIC SUBCLASS Mixed evergreen-deciduous forest (I.C)

PHYSIOGNOMIC GROUP Mixed needle-leaved evergreen - cold-deciduous forest (I.C.3)

PHYSIOGNOMIC SUBGROUP Natural/Semi-natural (I.C.3.N)

FORMATION Mixed needle-leaved evergreen - cold-deciduous forest (I.C.3.N.a)
ALLIANCE PINUS STROBUS - (PINUS RESINOSA) - POPULUS TREMULOIDES

FOREST ALLIANCE

## CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM TERRESTRIAL

#### **RANGE**

#### Vovageurs National Park

This type is found throughout the park, typically as part of a mix or as a mosaic of pure red or white pine and pure aspen-birch types.

## **Globally**

This association is found in Michigan, Minnesota, Wisconsin, and probably Ontario.

## ENVIRONMENTAL DESCRIPTION

## Voyageurs National Park

Stands are found on a variety of slope positions on shallow to deep (> 60 cm), dry-mesic to mesic, rapidly drained soils.

#### Globally

Stands are found on a variety of slope positions on shallow to deep (> 60 cm), dry-mesic to mesic, rapidly drained soils, with fine sandy to loamy soil textures (Sims *et al.* 1989, Minnesota DNR 1993, Chambers *et al.* 1997).

## MOST ABUNDANT SPECIES

## Voyageurs National Park

Stratum Species

Tree canopy Pinus strobus, Betula papyrifera, Populus tremuloides

Globally

Stratum Species

Tree canopy Pinus strobus, Betula papyrifera, Populus tremuloides

## CHARACTERISTIC SPECIES

#### Voyageurs National Park

Pinus strobus, Betula papyrifera, Populus tremuloides

#### *Globally*

Pinus strobus, Betula papyrifera, Populus tremuloides

## **VEGETATION DESCRIPTION**

## Voyageurs National Park

This type was not described separately at Voyageurs National Park. See global description for characteristics of this type.

## Globally

The tree canopy is mixed evergreen-deciduous. *Pinus strobus* may form a supercanopy over a mixture of other species, including *Betula papyrifera*, *Populus tremuloides*, *Picea glauca*, and *Abies balsamea*. Less frequent are *Pinus resinosa*, *Populus grandidentata*, and *Thuja occidentalis*. The subcanopy can include *Acer rubrum* and *Acer saccharum*, as well as a mixture of canopy species. Tall shrubs and saplings include *Abies balsamea*, *Acer* 

## USGS-NPS Vegetation Mapping Program Voyageurs National Park

spicatum, Amelanchier spp., and Corylus cornuta. Short shrubs include Diervilla lonicera, Linnaea borealis, Lonicera canadensis, and Vaccinium myrtilloides. Viburnum cassinoides may be present in the eastern part of the range. Herbs include Aralia nudicaulis, Aster macrophyllus, Clintonia borealis, Cornus canadensis, Maianthemum canadense, Oryzopsis asperifolia, Pteridium aquilinum, Streptopus roseus, and Trientalis borealis. Typical mosses include Pleurozium schreberi, Dicranum polysetum and Dicranum flagellare (Sims et al. 1989, Minnesota DNR 1993, Chambers et al. 1997).

CONSERVATION RANK G4?.

DATABASE CODE CEGL002479

#### COMMENTS

## Voyageurs National Park

The White Pine-Aspen-Birch Forest is rarely found as a distinct type; it more commonly is found as a mosiac of the White Pine/Mountain Maple Mesic Forest (CEGL002445) and the Aspen-Birch/Boreal Conifer Forest (CEGL002466). Where hardwoods, particularly *Populus tremuloides* and *Betula papyrifera*, are present in the canopy with *Pinus strobus* at > 25% cover, stands are classified as the White Pine-Aspen-Birch Forest.

## **Globally**

This community may arise as a successional stage after fire, but may also originate after logging.

#### REFERENCES

Chambers, B.A., B.J. Naylor, J. Nieppola, B. Merchant, P. Uhlig. Field Guide to Forest Ecosystems of Central Ontario. Southcentral Science Section (SCSS) Field Guide FG-01, Ontario Ministry of Natural Resources, North Bay, Ontario, Canada. 200 pp.

Minnesota Natural Heritage Program. 1993. Minnesota's native vegetation: A key to natural communities. Ver. 1.5. Minn. Dep. Nat. Resour., Nat. Heritage Prog. St. Paul, Minn. 110 p.

Sims, R. A., W. D. Towill, K. A. Baldwin, and G. M. Wickware. 1989. Field guide to the forest ecosystem classification for northwestern Ontario. Ontario Ministry of Natural Resources.